

2000 UTC 26 August 2018 Forecast Discussion

Summary

Convective activity is expected to be suppressed over the next 48 hours, with increased chances of deep convection beyond 48 hours associated with the westward propagation of a weak surface low pressure into the area of operation. JTWC has designated an invest 94W currently located at 10N 160E. However, winds and precipitation associated with 94W is not expected to affect the area of operation as it tracks northwestward. Swells from 94W could impact the area of operations beyond 72 hours depending on the TC genesis timing of 94W. Surface wind speed and wave height will remain low over the next 48 hours (variable 10 knot winds and significant wave heights of 0.5 to 1 m).

Day One (24 hr) Outlook: Convective activity will continue to be suppressed for the next 24 hours due to dry mid-level air and unfavorable upper-level convergence. No TC impact is expected in the next 24 hours. Surface wind will be light and significant wave height is expected to be 2-3 ft.

Day Two (48 hr) Outlook: The chance of deep convection is low in 24-48 hours, but it depends on the speed of dry air advection from the operation area to the west and the approaching low from the east to the operation area. Surface wind and wave height will be light and low for the next 48 hours.

Extended Outlook: Increased convective activity is expected after beyond 48 hours due to the propagating low coming in from the east. Invest 94W (currently located at 10N 160E) could intensify, but is expected to track northwestward and away from the area of operation. Swells associated with 94W could impact the area of operations, but that depends heavily on the time of genesis, in which GFS and ECMWF disagree.

Discussion

TCs: JTWC has designated an area of invest (Invest 94W) currently located around 10N 160E. The probability of TC formation within the next 24 hours is low, with GFS and ECMWF disagreeing on the time of TC genesis. GFS is more aggressive in developing 94W, showing significant increase in 850 mb vorticity associated with 94W by 12 UTC on August 29th, while ECMWF is showing a similar vorticity profile occurring much later (going into model La La Land forecast hour 144). However, both GFS and ECMWF agree on the general track of 94W. 94W is expected to track towards the northwest of its current location, with the circulation center reaching 20N 140E around 12Z on August 31st. The finer details of the track will be refined as more model runs come in, but both models have been consistently pushing 94W northwestward as discussed. Therefore, winds and precipitation associated with 94W is not expected to directly affect the area of operation as of today. Swells from a more developed 94W might affect the

area of operation, but that heavily depends on the time of TC genesis. No other TC activity is present or expected elsewhere in the Western North Pacific.

Convection: Convection is currently suppressed over the operation area due to low humidity and unfavorable upper-level convergence. The chance of deep convection is scarce around the operation area for the next 24 hours as the dry air blurb continues to influence the area. A low system may approach to the operation area in 48-72 hour time frame. Some ensemble runs of GEFS suggest a low-level circulation center (LLCC) of this low located around 13N 137E at 20180829 12 UTC. Thus, convective activity is expected to increase after beyond 48 hours.

MJO/BSISO: (No updates from yesterday's) BSISO indices have significant amplitude in phase 3-4 for the next 10 days. MJO has a marginally significant signal at phase 4-5 (maritime continent) and forecast to decrease into low next week.

SSTs: Temperatures should remain warm between 28-29C.

Currents and Wave Heights: COAMPS and FNMOC are not available, but according to NOAA GFS WW3 2018082612 forecast, significant wave height will be 0.5 to 1.0 meters with the wave direction from the east for the next 48 hours.

FORECASTERS: Razin and Nam

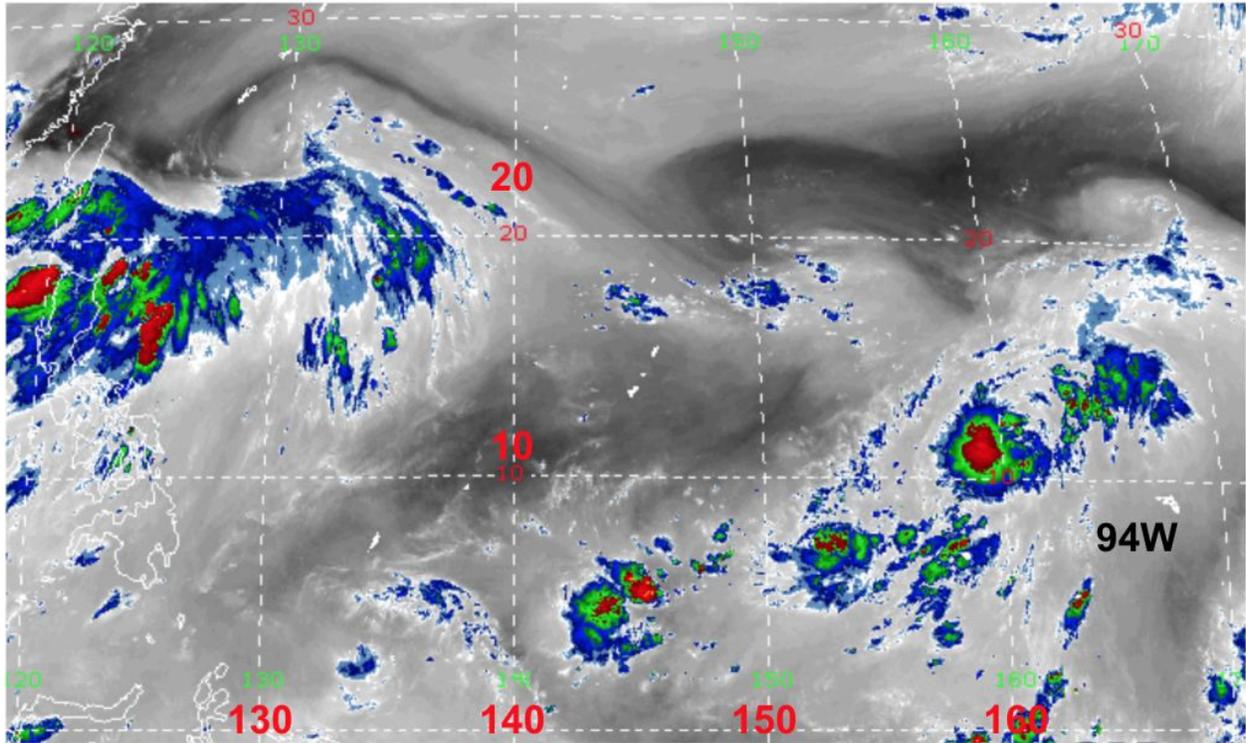


Fig. 1. Himawari water vapor imagery (6.2 microns) at 20180826 1800 UTC. [1]

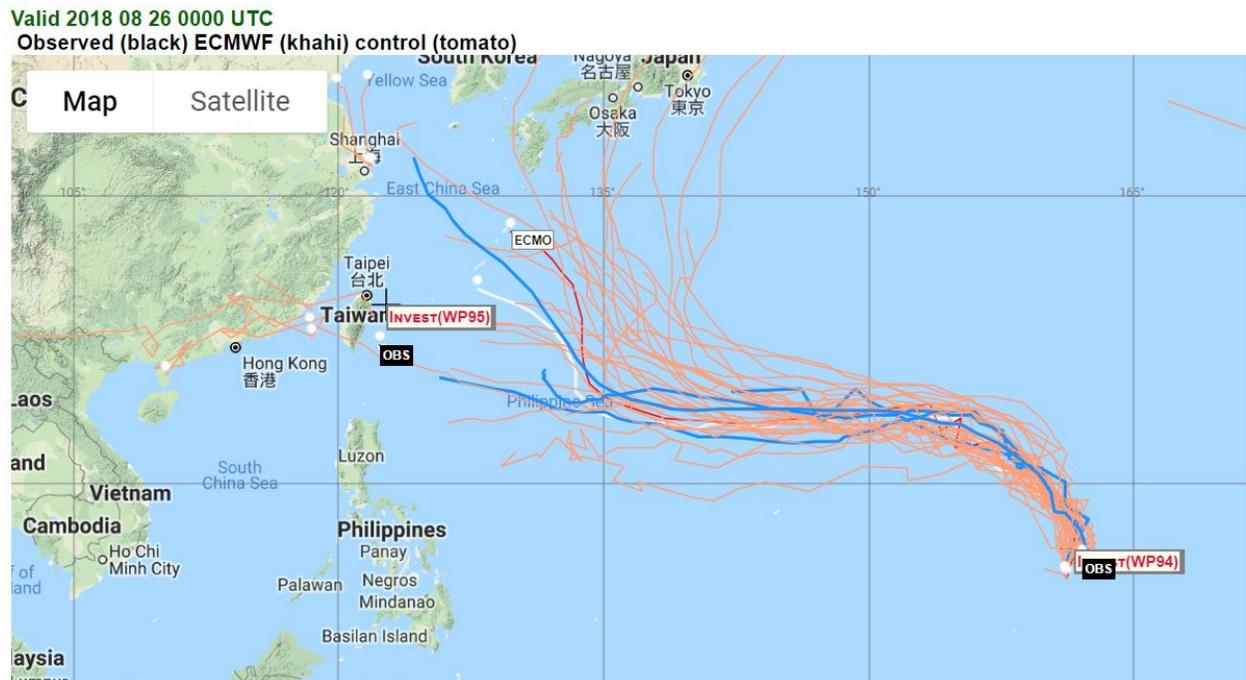


Fig. 2. ECMWF Ensemble TC track forecast valid 0Z August 26 [2]

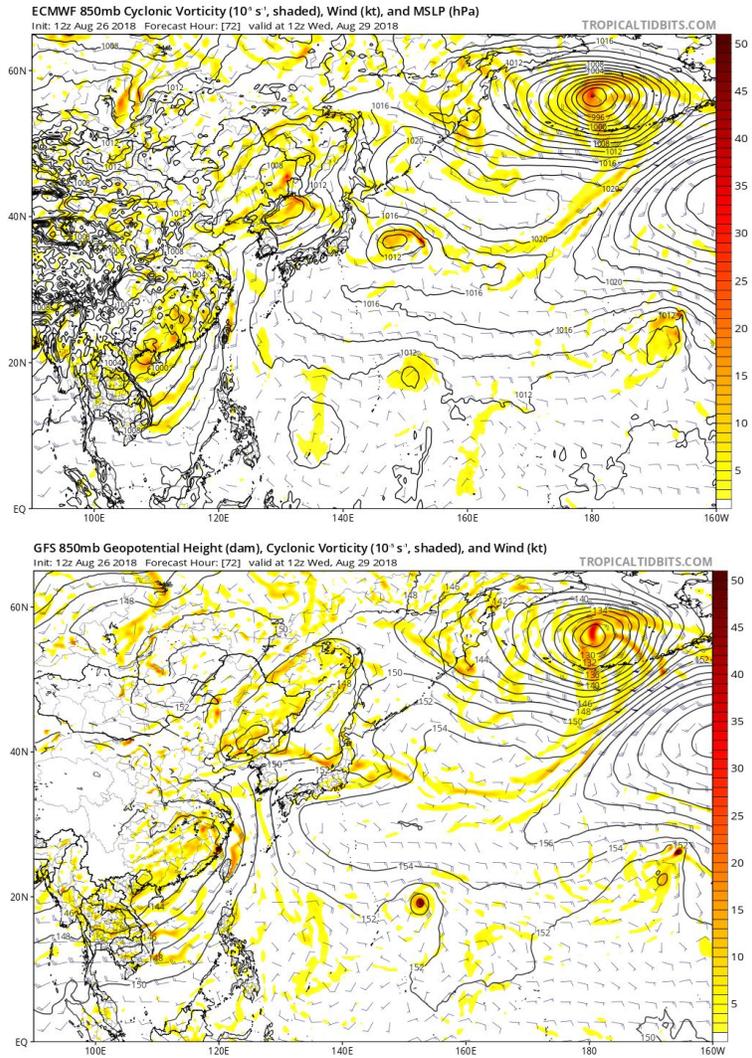


Fig 3. 850 mb vorticity (shaded) and winds (wind barbs) for ECMWF (top) and GFS (bottom). The lines are MSLP for ECMWF (top) and geopotential height at 850 hPa for GFS (bottom). Forecast valid 12Z on August 29 2018. [3]

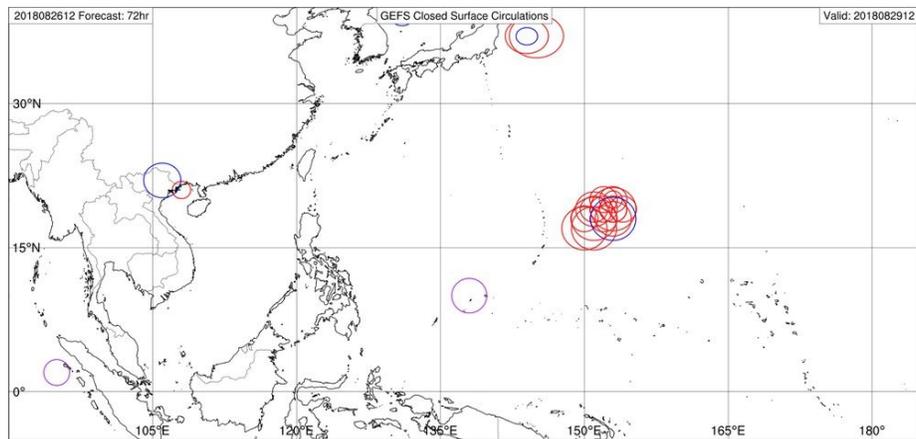


Fig. 4. 10m circulation GEFS ensemble forecast valid at 20180829 12Z [4]